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Compensation Philosophy Disclosure and CEO Equity Incentives

보상 철학 공시와 경영자 주식기준보상의 관계

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ABSTRACT

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Pay-for-Performance is frequently emphasized by firms in their Compensation Philosophy of the Compensation Discussion and Analysis (CD&A) disclosure. Using a sample of S&P 1500 firms that granted equity compensation in 2014, I analyze whether firms that emphasized pay-for-performance in their Compensation Philosophy granted equity compensation that was de facto more sensitive to performance, using as proxied by the equity compensation delta as a proxy for sensitivity. I find that on average, firms that mentioned pay-for-performance more frequently granted equity compensation with a lower delta. This negative result is driven by firms with weak governance or weak performance. Firms with strong governance or strong performance showed an insignificant relationship between the pay-for-performance phrase frequency and equity grant delta. These results

indicate that the Compensation Philosophy of the CD&A is utilized by firms as a form of impression management, rather than as a vehicle to provide incremental information.

Keywords: Compensation Disclosure, Narrative content, Equity Compensation Delta

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1. INTRODUCTION

The SEC requires that the Compensation Discussion and Analysis (CD&A) disclosure include "narrative (…) that puts into context the compensation disclosure (…) [and] explain[s] the material elements of the particular company's compensation for named executive officers by answering the following questions: What are the objectives of the company's compensation programs? What is the compensation program designed to reward?" (SEC 2006, 28). In response to these questions, firms describe the objectives of their compensation program in the form of a Compensation Philosophy. The Compensation Philosophy provides an excellent chance to observe the intentions and interpretations of the Compensation Committee regarding the executive compensation package.

The Compensation Philosophy has evolved into a type of voluntary disclosure that is "neither random nor boilerplate" (Bowen, Davis, and Matsumoto 2005, 1013). Because the SEC does not provide explicit guidelines, there is a considerable amount of variation in both the format and the contents of the Compensation Philosophy. Firms can choose the exact wording, order, visual presentation, length, etc. of the Compensation Philosophy.

This paper aims to capitalize on these cross-sectional variations and interpret the meaning of the Compensation Philosophy. Is the Compensation Philosophy merely a form of "cheap-talk"? Or is the Compensation Philosophy genuinely informative and relevant? Do firms act according to their Compensation

Philosophy?

In this paper, I specifically focus on the pay-for-performance philosophy of firms. Faced with public outrage and heightened shareholder scrutiny, pay-for-performance has become a popular motto in the Compensation Philosophy of firms. Many firms repeatedly mention pay-for-performance and even create separate sections illustrating how pay-for-performance is integrated into their compensation schemes. Alternatively, some firms rarely mention pay-for-performance. In this paper, I analyze how the emphasis on pay-for-performance in the firms' Compensation Philosophy translates into the pay-for-performance sensitivity of the firm's equity compensation. Do firms that emphasize pay-for-performance provide CEOs with equity compensation that is more sensitive to performance, i.e., with higher pay-for-performance?

The agency theory posits that the board of directors strive to reduce the information asymmetry with shareholders. Because the average CD&A has low readability (Laksmana, Tietz, and Yang 2012), the Compensation Committee may want to accentuate key aspects of the compensation package to shareholders. Therefore, the Compensation Committee could utilize this channel to communicate incremental information above and beyond the numeric figures disclosed in the summary compensation table.

On the other hand, impression management literature would argue that executives would want to hide certain less desirable aspects of their compensation. The Compensation Philosophy may be an adequate tool to frame precarious issues

in a more favorable light. Mentioning certain phrases more frequently could create a cognitive bias that portrays the compensation package in the CEO's favor.

I examine the Compensation Philosophy section of the Compensation Discussion and Analysis (CD&A) disclosures for the S&P 1500 firms of 2014, and quantify the frequency of pay-for-performance related phrases in the Compensation Philosophy section. I analyze the association between the frequency of pay-for-performance and the actual pay-for-performance sensitivity of the CEO's equity compensation, with the annual equity compensation delta proxying for the pay-for-performance sensitivity. Thus, I observe whether a firm's compensation practices reflect their stated Compensation Philosophy. If firms are true to their words, then firms that frequently mention pay-for-performance would indeed award equity grants that have higher pay-for-performance sensitivity. Regression results indicate an alternative explanation; firms that mention pay-for-performance more frequently surprisingly grant equity compensation with lower pay-for-performance sensitivity.

To interpret this negative relationship, I postulate certain circumstances, such as corporate governance and firm performance, that would augment the negative relationship. Subsample analyses reveal that the negative relationship between pay-for-performance frequencies and delta is mainly driven by firms with weak performance and by firms with weak governance. Interestingly, there is no significant relationship between the frequency of pay-for-performance phrases and the equity compensation delta when there is strong governance or strong

performance. This asymmetrical tendency indicates that while the Compensation Philosophy section does not have additional information, the Compensation Philosophy has disinformation on the compensation practices of the firm.

This paper contributes to the literature in three ways. This paper is the first to observe whether firms act according to their Compensation Philosophy. This paper provides descriptive statistics on the Compensation Philosophy section of the CD&A. I find that although firms emphasize pay-for-performance in their Compensation Philosophy, this is not reflected in their actual compensation practices.

Secondly, this paper contributes to the compensation disclosure literature by observing the narrative content disclosure of the CD&A. I illustrate how the Compensation Committee uses repetition as a disclosure tool within the CD&A. I contribute to the debate on whether management uses disclosure to reduce the information asymmetry with shareholders and stakeholders, or whether management uses disclosure to manage impressions. Prior literature has examined the annual reports, letters to shareholders, and conference calls; except for Laksmana et al. (2012) , this paper is the first to deal with the narrative content of the CD&A.

Lastly, this paper contributes to the equity compensation literature by examining how firms reduce the political costs of disclosing equity compensation with low pay-for-performance, especially in the presence of certain circumstances such as low performance and weak governance. Corporate governance and firm

performance have been known to affect equity compensation grant behavior of boards. It is common knowledge that good governance firms increase their pay-for-performance sensitivity. This paper suggests that bad governance firms may lower their pay-for-performance sensitivity, but may not want to reveal that fact due to unwanted negative backlash from employees, shareholders, or regulatory authorities. This paper is the first to directly examine firm's explanations and justifications for the pay-for-performance sensitivity of executive equity compensation.

2. HYPOTHESES DEVELOPMENT

Researchers have analyzed various narrative disclosures for the hidden meanings and motives. Li (2010) suggests that communication patterns allow researchers to directly observe managers' biases, incentives, and even private information sets. Merkley (2013) study the informative value of R&D disclosures, because managers may believe financial statements alone cannot fully describe the idiosyncratic nature of R&D investments. Of the various types of corporate narratives, the shareholders' letter largely resembles the Compensation Philosophy section. Similar to Compensation Philosophy, management has substantial discretion over the contents of the shareholders' letter (Abrahamson and Amir 1996), and management thus utilizes this vehicle to create a desirable reputation for the firm (Geppert and Lawrence 2008).

The primary focus of corporate narrative research is whether the narrative has incremental information, or is utilized as a tool for impression management in favor of the executives or the board of directors. Merkl-Davies and Brennan (2007) provide an extensive literature review on corporate narrative disclosures and categorize the literature into whether it views the disclosures as incremental information or impression management. Based on this debate in the existing literature, I create the main hypothesis with two competing explanations.

2.1 Compensation Philosophy as Incremental Information

Management uses disclosure to communicate firm performance and governance (Healy and Palepu 2001), and therefore disclosures inherently provide incremental information. Sheu, Chung, and Liu (2010, 1120) note that "any regulations created to facilitate credible disclosure are essentially aimed at reducing information asymmetry." Compensation disclosure also acts as a monitoring mechanism by forcing firms to reveal more information content and set compensation with higher pay-for-performance sensitivity (Sheu et al. 2010). Increased scrutiny ushers in a risk of public outrage and limits excessive compensation (Bebchuk and Fried 2003).

Furthermore, based on the theory of self-selection, firms that provide compensation with higher pay-for-performance have more incentive to communicate their compensation package details to shareholders (Jensen and

Murphy 1990; Conyon and Sadler 2001). Sheu et al. (2010) find that firms with strong governance will provide more comprehensive compensation disclosure. Full disclosure on compensation may alleviate agency conflicts between shareholders and executives (Muslu 2010; Morse, Nanda, and Seru 2011). The compensation committee would have incentives to use the Compensation Philosophy to signal strong governance to shareholders, and thus reap the benefits of less agency conflicts, such as higher market valuation (Lo, 2003). Therefore, firms with higher pay-for-performance have incentive to communicate this positive trait to shareholders, and thereby voluntarily mention the importance of pay-for-performance in their Compensation Philosophy. If the incremental information hypothesis holds, there should be a positive relationship between the frequency of pay-for-performance mentioned in the Compensation Philosophy and the pay-for-performance sensitivity of the equity grant.

2.2 Compensation Philosophy as Impression management

Impression management has its foundation in social psychology (Merkl-Davies and Koller 2012; Goffman 1959). Corporate narrative documents are seen as tactics and strategies deliberately used by the management. Merkl-Davies and Koller (2012, 179) note that, "as corporate reporting occurs in the (imagined or implied) presence of organizational audiences, impression management thus constitutes as integral feature of corporate narrative reporting. What is more, language use in corporate narrative documents is never 'innocent',

because it is used to achieve a variety of economic, social, and political goals […]." Laksmana et al. (2012) observe that top management tends to camouflage its compensation practices when there is excess compensation to reduce animosity over their compensation package. Muslu (2009) and Morse et al. (2010) note that a reduction in outrage can be achieved by the camouflaging of rent seeking activities.

Shareholders, Government authorities, and the public would become suspicious of the accountability and effectiveness of the Compensation Committee if the executive compensation is not aligned with firm performance. Firms that grant equity compensation that is less tied to performance could face shareholder backlash if the shareholders realize the true nature of these equity grants. Firms could obfuscate information, but this could endanger the firm by provoking confused readers to increase scrutiny on the details of the compensation package. Apprehensive of further scrutiny or backlash from shareholders, the Compensation Committee would want to appease shareholders by mentioning pay-for-performance more frequently. This tendency could lead to a negative relationship between frequency of mentioning pay-for-performance and the equity grant delta.

The degree of impression management can be divided into two groups based on the legal consequences. Huang (2005, 115) categorizes impression management into two types: (1) vague statements, e.g., "we are bullish on this company's future prospects", and (2) " "false implied meanings that are thus deceptive, misleading, and can be disproved". He suggests that the unlike the

second type, the first type is not legally actionable because it "is unlikely to induce any false implied meanings that directly affect investors' beliefs concerning that company's securities." If the frequent mention of pay-for-performance is a form of impression management, this behavior would fall into the first category of impression management. Since the litigation risks are low, the Compensation Committee does not suffer additional costs from disclosing misleading information. This could provide incentive for the Compensation Committee to indulge themselves in mentioning pay-for-performance more often.

Furthermore, Mercer (2005) finds that although the positive effects of more forthcoming disclosure may be visible in the short-term, these short-term credibility effects are temporary. In the long run, investors trust managers who show positive earnings, regardless of the initial honesty in disclosures. Therefore, managers would not be greatly restricted from announcing whatever they wish to in the immediate proxy statement.

Based on the competing explanations of incremental information hypothesis and the impression management hypothesis, I construct the first hypothesis on the relationship between pay-for-performance frequency and equity grant delta. I state the following two-sided hypothesis in null form:

H1: The Compensation Philosophy's emphasis on Pay-for-Performance is related to the CEO's equity compensation delta.

2.3 Hypotheses on Corporate Governance

Shareholders prefer performance-based compensation that align the interests of shareholders and executives. However, performance-based compensation inflicts more risk on executives (e.g., Diamond and Verrecchia 1982; Holmstrom 1979; Harris and Raviv 1979; Hirshleifer and Suh 1992). Executives prefer compensation contracts that maximize personal wealth and minimize compensation risk (Jensen and Meckling 1976; Amihud and Lev 1981). As executives prefer less risky compensation (Hall and Murphy 2000), powerful CEOs may establish compensation contracts that award less incentive pay (Muslu 2010). On the other hand, powerful CEOs may award more incentive pay to mitigate possible monitoring problems (Core, Guay, and Larcker 2003). Together, it is implied that corporate governance may or may not affect the relationship between pay-for-performance frequency and equity grant delta. The Compensation Committee may structure compensation packages with higher pay-for-performance to alleviate monitoring problems. On the other hand, the Compensation Committee may acquiesce to the CEO's risk averseness and award compensation with lower pay-for-performance.

In the context of the CD&A, the governance of Compensation Committee is the most directly relevant measure. The Compensation Committee oversees the entire process of determining the executive compensation package. Furthermore, the narrative content of the CD&A is generally written with the Compensation Committee as the subject. Therefore, I measure the Compensation Committee age, busyness, independence and size to measure the monitoring power of the

Compensation Committee. I also analyze the whether the CEO is the Chairperson of the Board of Directors to consider the overall board characteristics.

Institutional ownership also acts as a governance mechanism. Hartzell and Starks (2003) find that institutional ownership concentration is positively correlated with the executive compensation delta. Institutional shareholders would act as a governance mechanism to align pay with performance. Therefore, governance could also be measured by institutional ownership. I divide the samples into high institutional ownership and low institutional ownership based on the level of institutional ownership (Hartzell and Starks 2003) and find qualitatively similar results with that of the Compensation Committee governance.

Barton and Mercer (2005) provide experimental research on why institutional ownership would affect the relationship between pay-for-performance and equity grant delta. They find that if analysts do not find managerial explanations convincing, analyst regard the explanations as "cheap talk" (costless communication without much effect), i.e., impression management, and ignore the explanations. Cheap talk models sometimes include "babbling equilibria" in which uninformative messages are ignored by users (Farrell and Rabin 1996; Crawford 1998). Therefore, when institutional ownership is high, the Compensation Committee may not engage in "cheap talk" because sophisticated investors would see through the motives.

H2: Corporate Governance could affect the relationship between Compensation Philosophy and Equity Compensation.

2.4 Hypotheses on Firm Performance

The Compensation Philosophy is a type of interpretation of the Compensation Committee, and could be subject to the self-serving attribution bias. The self-serving attribution bias illustrates how individuals take credit for successes but blame other individuals or circumstances for failures. Based on the self-serving attribution bias, managers would take credit for positive outcomes, and blame other reasons for negative outcomes (Merkl-Davis and Brennan 2007; Barton and Mercer 2005; Bettman and Weitz 1983; Staw, McKechnie, and Puffer 1983). Baginski, Hassell, and Kimbrough (2004) regards these attributions as incremental information that "aid investors in the interpretation of management forecasts by confirming known relationships between attribution and profitability or by identifying additional causes that investors should consider when forecasting earnings" (Baginski et al. 2004, 1).

Barrick and Mount (1995, 262) differentiate between self-deception and impression management. "Self-deception is a dispositional tendency to think of oneself in a favorable light, whereas impression management refers to a deliberate attempt to distort one's responses in order to create a favorable impression with others". In the context of this paper, the Compensation Committee may not be actively attempting to deceive shareholders through impression management; their language may reflect the ordinary hubris of individuals. Merkl-Davis and Brennan (2007, 53) note that behavioral biases, such as optimism (hubris) and

overconfidence, should be distinguished from impression management in analyzing corporate narrative disclosures. "If managers are regarded as irrational participants in the financial reporting process, then their tendency towards reporting bias could be the result, not of impression management but of self-deception (hubris)".

Therefore, when performance is strong, there are inherent cognitive biases for the firm to boast of its excellent performance. Furthermore, when this performance translates into higher compensation, executives have incentive to attribute this success to their own performance. Reflecting this tendency, the Compensation Committee may mention pay-for-performance more frequently to justify the higher compensation for the fiscal year. In this sense, there should be a positive relationship between pay-for-performance and equity grant delta when there is strong performance.

On the other hand, when performance is weak, executive may interpret this bad performance as a result of external factors beyond their control. The Compensation Committee may believe these justifications and place less emphasis on pay-for-performance. If indeed results indicate that firms have a positive relationship between pay-for-performance frequency and equity compensation delta, then this phenomenon can be explained by the self-serving attribution bias.

It is interesting to note that unlike earnings narrative disclosures, the incremental information and impression management mechanisms function differently with compensation disclosure. For example, when earnings

performance is positive, firms have no need to further explain their situation and have little incentive to reduce the information asymmetry. Rather, they have proprietary concerns in revealing the secrets of their success. When performance is bad, firms have incentive to explain why the poor performance is not based on their internal attributes, but based on external factors outside their control. If they are biased unconsciously, the phenomenon is explained by self-serving attribution bias. They are unconsciously trying to find reason outside their actions to explain their disadvantageous circumstances. If they are consciously deceiving the shareholders, the phenomenon is explained by impression management. Executives are trying to mask the true reason behind the weak performance so that the shareholders would not penalize executives for the poor performance.. However, the mechanisms behind compensation disclosure is different.

Shareholders want to ex ante construct a compensation scheme that awards strong performance, in contrast to a compensation scheme that awards to poor performance. However, this does not mean shareholders want a compensation scheme that rewards CEOs handsome amounts of compensation. Shareholders will be weary of excessive compensation, and be more skeptical of higher compensation even if firm performance is strong. Therefore, in order to 'earn' the high compensation, CEOs would need to justify their compensation more in the case of strong performance. CEOs have strong personal incentive to reduce the information asymmetry when performance is positive. This is in contrast with the earnings disclosures, where strong performance does not require additional

explanations; strong performance speaks for itself. On the other hand, when performance is bad, CEOs could either reduce or increase the amount of narrative disclosure. Because shareholders would be even more weary of higher compensation in the face of bad performance, CEOs could have incentive to reduce further explanation and be careful of provoking any anger from the shareholders. However, sinners are rarely silent. Based on the self-serving attribution bias, managers would have many excuses for their bad performance. Therefore, the amount of narrative disclosure would increase. However, the phrase 'pay-for-performance' would be unique in this sense. Despite the increase in narrative content, managers could be weary of mentioning pay-for-performance because this directly goes against their situation. Intuitively, in the case of bad performance, pay-for-performance should be mentioned less because this would negatively impact the executives' compensation. They do not necessarily need to mention this more often. Of course, this could be the basis of sadistic joy or self discipline, but judging by the commonly egocentric nature of CEOs this should be less likely. If in the face of bad performance, managers mention pay-for-performance more often, this could be a prelude for warning bells.

H3: Firm Performance could affect the relationship between Compensation Philosophy and Equity Compensation.

3. RESEARCH SETTING

3.1 Sample Selection

I hand-collect the frequency of 'Pay-for-Performance' phrases in the Compensation Discussion and Analysis overview section of proxy statements of the S&P 1500 firms for the fiscal year 2014. The initial hand-collected sample has 1494 firm observations. A total of 1037 observations were removed to leave a final sample of 457 observations. 992 observations did not have equity grant delta for 2014. 8 observations were deleted due to having an insufficient number of peers to calculate Peer PFP in their Fama and French classified 48 industries. 37 observations were omitted due to missing variables from Compustat and ISS (formerly RiskMetrics) database. Panel A of Table 1 shows the sample selection process for the finalized 457 observations. Table 1 Panel B shows the Pay-for-Performance frequency by each Fama-French industry classification for the final sample.

I obtain CEO compensation and characteristics from Standard & Poor's ExecuComp database and compensation committee data from the ISS database. Accounting data and Stock return data was provided by the Compustat and CRSP database respectively. Institutional ownership data was retrieved from the Thomson Reuters database.

3.2 Pay-for-Performance Frequency

Using Python, a programming tool, I counted the number of times phrases meaning 'Pay-for-Performance' appeared in the CD&A overview section. Appendix A includes the list of phrases included as 'Pay-for-Performance' phrases. The list aims to be comprehensive; nonetheless, the list is not exhaustive. Any idiosyncratic phrases mixed in between would cause the phrase to be excluded from the count. For further research, the pay-for-performance phrases should be jointly analyzed with the word 'shareholders' to include all phrases such as 'align compensation with Company A's shareholders'.

In measuring Pay-for-Performance frequency, I took a na?ve approach. I assumed that the firm's emphasis on pay-for-performance increased linearly with the frequency of the term. Research on narratives often use quantitative volume to draw statistical inferences (Tregidga, Milne, and Lehman 2012). However, emphasis on the phrases may take a convex or concave form. Nonetheless, in an untabulated analysis, the quartiles of the pay-for-performance phrases provide qualitatively similar results to the main analyses.

The pay-for-performance phrases were collected from the overview section of the Compensation Discussion and Analysis (CD&A). The overview section includes the Executive summary, Compensation Decision summary, Compensation Philosophy, What We Do and What We Don't Do, Key Compensation Decisions, and Business Summary. I included the business summary, compensation decision summary, and the executive summary because I believed the contents of these sections revealed what the Compensation Committee wanted to emphasize. The

Compensation Committee made a deliberate decision to include and exclude certain material. Some firms use this section to elaborate on their business achievements for the fiscal year. Some firms use this section to mention how their compensation is directly linked to firm performance. Although the Compensation Philosophy of 'Pay-for-Performance' is the foremost focus of the paper, I took a comprehensive approach on the overview section and included the sections other than the Compensation Philosophy. In addition, when firms created a separate section titled 'Pay-for-Performance', I regarded this as additional emphasis and counted the title as an additional mention of pay-for-performance.

Because the content and format of the overview sections are highly idiosyncratic, I strived to reduce any cross-sectional bias in regards to content collection. I excluded the sections that included unique compensation related information for the firm, such as leadership changes, responses to shareholder request, and the Say-on-Pay section. I excluded the Say-on-Pay section because occasionally it included responses to shareholder requests. The contents of the shareholder requests contain information that is contingent on the prior shareholders' requests, therefore it would not be universally applicable. In this spirit, I excluded all individual information of CEOs as well.

In order to focus on the narrative content and not the actual details of the compensation, I excluded any information directly dealing with the compensation specifics. For example, I ignored all the sections that described the compensation mix and the details of the salary, annual bonus, and equity compensation.

Pay-for-performance was regularly mentioned in the annual bonus due to the annual bonus being a performance-based compensation by definition. However, the focus of the paper is in the additional narrative content that the firm emphasizes as its Compensation Philosophy. Therefore, the details of each compensation item were purposely excluded. Nonetheless, the designated sections do include narrative content in itself. Not all firms may decide to bring important content to the foremost section of the CD&A. It could be possible that firms that fully explained their compensation policies in each subsection do not feel the need to mention any material in the overview. Therefore, for a more comprehensive analysis, this research could be expanded to include the entire Compensation Discussion and Analysis.

I did not count the number of the entire words in the CD&A or the passages I collected. Firms may mention pay-for-performance numerous times in a short passage; firms may not mention pay-for-performance at all in 5 pages. I postulated that the total number of words would not be comparable among firms or would have any defining affect on the firm's emphasis.

3.3 Equity Grant Delta

Following research on equity incentives, the term "equity incentives" indicates the executive incentives to increase stock price (Core, Guay, and Larcker 2003). Stock option grants are a crucial component of executive equity incentives. (Hall and Liebman 1998) I calculate the pay-for-performance sensitivity of the executive

equity compensation granted that year as the changes in the Black-Scholes value of the option portfolio (Core and Guay 1999).

3.4 Corporate Governance

In the context of the CD&A, the governance of Compensation Committee is the most directly relevant measure. The Compensation Committee is in charge of the entire process of determining executive compensation packages. Furthermore, the narrative content of the CD&A is often written with the Compensation Committee as the subject. Therefore, I look into the Compensation Committee age, busyness, independence and size to measure the monitoring power of the Compensation Committee. I also analyze the whether the CEO is the Chairperson of the Board of Directors to consider the overall board characteristics. Governance variables are structured so that a higher value indicates stronger governance. I calculate the industry median for each compensation committee characteristic variable, and create an indicator variable for whether the variable is above industry median. I then sum the four Compensation Committee variables (busyness, age, independence, and size) and add the CEO duality variable to create the final governance indicator variable of ihcgov4. I divide the sample according to the indicator variable ihcgov4 into strong governance group and weak governance group. I perform subsample analyses based on these samples.

I perform similar analyses using institutional ownership as an alternative governance mechanism. Following Hartzell and Starks (2003), I measure the

institutional investor influence through the concentration of institutional ownership. Institutional shareholders would be more influential when they are larger shareholders and "when they have allies in the form of other shareholders (e.g., Black 1992)". I calculate the institutional ownership as the percentage of the top 5 institutional owners of the entire institutional ownership percentage. I divide the sample into two groups based on whether the institutional ownership ratio is above the industry median for each Fama-French 48 industry classification. I then perform separate analyses of the main regression model for the high institutional ownership group and the low institutional ownership group.

3.5 Performance Measurement

Performance is measured against the industry peer performance based on the Fama-French classified 48 industries. I calculate the industry peer performance for each industry classification, and then divide the sample into two groups based on whether the firm's performance is above the industry peers or below the industry peers. I use the firm performances of 2013 for both the focal firm and the industry peer firms to alleviate endogeneity concerns.

3.6 Descriptive Statistics

Table 2 Panel A reports descriptive statistics for the sample. All continuous variables are winsorized at the 1st and 99th percentiles. Appendix B lists the

variable definitions. The sample consists of 457 firms with valid data. The median frequency of pay-for-performance is 3 times. The frequency of pay-for-performance mentioned ranges from a minimum zero times to a maximum 21 times. The logarithm of PFP is used in the regression analysis. The median equity grant delta is 5.17. Panel B of Table 2 shows the correlation between the variables. The correlation between the main variables of interest, namely log_pfp and log_delta_grant is insignificant.

4. RESEARCH DESIGN AND RESULTS

4.1 Empirical Design

To examine the relationship between Compensation Philosophy and the CEO equity compensation, I regress the equity grant delta on the frequency of pay-for-performance. The regression model is as follows:

$$\begin{aligned} Log(grantdelta)_{i,t} = {} & \lambda_0 + \lambda_1 PayforPerformance_{i,t} + \lambda_2 PeerPFP_t \\ & + \lambda_3 SIZE_{i,t-1} + \lambda_4 MTB_{i,t-1} + \lambda_5 PPE_{i,t-1} \\ & + \lambda_6 CASHCOMP_{i,t-1} + \lambda_7 StockReturn_{i,t-1} \\ & + \lambda_8 StockReturn_{i,t} + \lambda_9 NOL_{i,t-1} + \lambda_{10} CASH_{i,t-1} \\ & + \lambda_{11} CashflowShortfall_{i,t-1} + \lambda_{12} \div ndConstraint_{i,t-1} \\ & + \lambda_{13} Leverage_{i,t-1} + \in dustry fixed\ effects \end{aligned}$$

I obtain CEO compensation and characteristics data from the ExecuComp database. Following prior literature (e.g., Armstrong and Vashishtha 2012) we

include standard firm-level determinants of equity delta obtained from the Compustat and CRSP databases. The logarithm of sales (SIZE) capture firm size. The market-to-book ratio (MTB) and net investment in property, plant and equipment scaled by total assets (PPE) capture the firm's investment and growth opportunities. Cash compensation (CASHCOMP) is the sum of the salary and bonus compensation of the CEO. Cash compensation proxies for the risk-averseness of the CEO. Stock return of the current year and prior year controls for the firm stock price performance. Net Operating Loss, cash balance, cashflow shortfall, dividend constraint, and leverage capture the firm's financial condition. (Core and Guay 1999; Armstrong and Vashishtha 2012). The industry peer PFP is included to control for the industry trend of mentioning pay-for-performance . The primary coefficient of interest is λ1, the coefficient of log_pfp.

4.2 Pay-for-Performance philosophy and Equity Compensation

Table 3 shows the regression results of the aforementioned model for the entire sample of 457 observations. The coefficient estimate of PFP indicates that the frequency of pay-for-performance mentions in the Compensation Philosophy is significantly negatively correlated with the pay-for-performance sensitivity of the year's equity compensation grant. This suggests that the more frequently a firm mentions pay-for-performance, the less sensitive to performance the firm's equity

compensation. This result indicates that the Compensation Philosophy does not provide incremental information that reduces the information asymmetry, but rather is utilized as a form of impression management of the executive.

4.3 Determinants of PFP

In order to decipher the meaning behind this negative relationship between PFP and equity delta, I analyze the determinants of PFP. The determinants largely proxy for four areas: excess compensation, information asymmetry, proprietary costs, and political costs. Although the mention of pay for performance could be a direct proxy of the degree of pay-for-performance sensitivity within the firm, here I focus more on the firm attributes that connect to information asymmetry.

Based on the negative relationship observed in Table 3, I include excess compensation and expected compensation from Core, Guay, and Larcker (2008) as a determinant for PFP. A significant relationship between excessive compensation and pay-for-performance frequency would indicate that underlying governance factors could affect the pay-for-performance frequency of the Compensation Philosophy.

Factors that affect the information asymmetry of firms should be linked to increased disclosure. By decreasing the information asymmetry between shareholders and executives, disclosure may act as a governance mechanism and lead to further benefits such as lower cost of capital (Lo 2003; Matsumura and Shin 2005). Therefore, firms with complex operations, restructuring firms, and firms

with growth opportunities may have a higher incentive to disclose more information.

Hyun, Kim, Kwon, and Shin (2014) note that heightened disclosure may impose "political costs associated with increased public scrutiny on the appropriateness of executive pay". Hyun et al. (2014) identify the proprietary costs, proxied by the degree of competition in the industry, and political costs as the costs of associated with strategic disclosure. Their perspective follows that of prior literature observing that disclosure decisions are strategic decision considering political costs (Watts and Zimmerman 1990; Healy and Palepu 2001).

When the proprietary costs are high, disclosing the compensation details would be more costly to a firm (Robinson, Xue, and Yu 2011). Proprietary costs are proxied by the intensity of industry competition. The Herfindahl-Hirschman index of the firm's sales market share in the industry (e.g., Harris 1998) is subtracted from one to indicate that a larger value translates into a more competitive (less concentrated) industry. In this paper's context, firms in a more competitive industry may have the incentive to emphasize pay-for-performance more frequently because of the intensity of the CEO labor market.

Following Hyun et al. (2014), I differentiate between the political costs of disclosing lower pay-for-performance and disclosing vague information. Firms with poor performance and high leverage could be apprehensive of opposition from shareholders and creditors (Eng and Mak 2003). Firms with negative income before extraordinary items and higher Altman's Z-score, indicating the bankruptcy

possibility, would bear especially high political costs.

With regards to the political costs of making vague disclosures, firm size is used to proxy for regulatory sanctions and public scrutiny. (Bannister and Newman 2003; Gong, Li, and Shin 2011). Robinson et al. (2011) note that SEC disclosure regulations are more strictly enforced in larger firms. Firm size is measured as the logarithm of total assets.

4.4 Corporate Governance

Regression results in Table 5 show that when governance is bad, the Compensation Committee awards executive compensation that is less sensitive to performance, thus reducing executive pay risk. Despite the lower pay-for-performance of equity compensation, the Compensation Committee mentions pay-for-performance more frequently. This may be tolerated due to the low monitoring abilities of shareholders due to a lower portion of key institutional investors, or the compensation committee being busier, older, or smaller. However, when governance is good, the Compensation Philosophy itself does not provide additional information on the pay-for-performance sensitivity of the equity compensation. A possible explanation would be that the Compensation Committee does not feel further need to convince the audience. This indicates that while the Compensation Philosophy section does not have valuable information, it has disinformation on the compensation practices of the firm. This refutes the

explanation that any disclosure is an attempt to reduce information asymmetry. Instead, this is a case of agency conflicts, whereby managers exploit the information asymmetry to extract rent.

4.5 Firm Performance

Table 6 shows that when firm performance is weak, firms that mention pay-for-performance more frequently grant executives equity compensation that is less sensitive to firm performance. When performance is bad, less sensitive compensation would shield managers from lower compensation. This indicates that CEOs are being shielded from the bad performance. Prior empirical evidence shows that there is only a weak link between firm performance and CEO turnover (Brickley 2003).

The results cross out the attribution theory interpretation for corporate narratives. If attribution theory holds, then managers should mention pay-for-performance more strongly in the presence of good performance. Managers should mention pay-for-performance more frequently to take credit for the hard work they feel they have done. On the other hand, manager should refrain from mentioning pay-for-performance when performance is weak. But interestingly, managers mention pay-for-performance more in the face of negative performance. This phenomenon indicates that irrational individual biases such as self-serving attribution biases do not explain the contents of the Compensation Philosophy. This rather indicates that managers are being protected from being

penalized for poor performance, and the Compensation Committee is actively managing impressions to disguise the actual compensation package.

5. ADDITIONAL ANALYSES

5.1 Correcting for Possible Sample Selection Bias

I employ a Tobit model to control for the possible sample selection bias. Since the main regression analysis is based on the fact that the firm grants equity in the respective year, firms that do not grant equity in 2014 will not be excluded from the sample.

Additionally, I perform a Heckman twostep analysis using Management Forecast as an instrumental variable. Management forecast may be correlated with the grant amount . The coefficient on the management forecast indicator variable is significant, indicating a correct instrumental variable. Results of the main regression analysis remain after controlling for the sample selection bias.

5.2 Endogeneity Issues

Endogeneity is an issue that cannot be ignored yet is difficult to fully address. There may be omitted variables, such as poor performance that directly affect both the equity compensation delta and pay-for-performance frequency. Causality is also difficult to fully establish. Research on corporate narratives are association studies and does not establish causality (Li 2011; Lehavy, Li, and Merkley 2011;

Matsumoto, Pronk, and Roelofsen 2011). In this paper, I do not assume any direct causality, and stop at association.

To mitigate simultaneity issues as best as possible, I lag all control variables, including firm attributes, and firm governance variables. Without the lag on control variables, it would be difficult to distinguish the impact of log_pfp and equity delta from the effect of other variables.

6. CONCLUSION

Despite the emphasis of Pay-for-Performance in the Compensation Philosophy of the Compensation Discussion and Analysis (CD&A) disclosure, the frequency of terms meaning 'pay-for-performance' did not reflect the actual pay-for-performance sensitivity of the executive equity compensation. I found a negative relationship between the equity compensation delta and the frequency that the Compensation Committee mentions pay-for-performance. Subsample analyses revealed that these negative results were driven by weak governance and weak performance. Interestingly, when governance or performance was strong, the relationship between equity compensation delta and pay-for-performance frequency was insignificant. These empirical results suggest that the contents of the Compensation Philosophy is a result of impression management of the Compensation Committee, rather than being a vehicle to convey incremental information.

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APPENDIX A

List of Phrases that mean 'Pay-for-Performance'

align the interests of our executive officers with shareholders / aligned with performance / aligned with stockholder value / alignment of executive compensation with performance / alignment of executive pay / alignment of our chief executive officer's pay / alignment with performance / business performance and CEO compensation / company performance on executive compensation / compensation and performance / compensation based on performance / compensation to company and individual performance / compensation to company performance / focus on performance / link pay with performance / linked to company performance / linked to our performance / linked to pay / linked to performance / linking pay to performance / linking pay with performance / pay & performance / pay to performance / pay aligned with performance / pay aligns with performance / pay and company performance / pay and performance / pay for performance / pay reflected 2014 performance / pay relative to company performance / pay with performance / pay-for-performance / performance & pay / performance affected compensation / performance and compensation / performance and executive compensation / performance and executive pay / performance and pay / performance based compensation / performance based pay / performance linked compensation / performance orientation of executive compensation / performance-based compensation / performance-based pay / performance-related compensation / performance related pay / performance to pay / reflect our performance / reflect performance / reflects performance / related to performance / relationship between our performance and ceo compensation / rewarded performance / reward performance / rewards performance / shareholder return alignment / tied to company performance / tied to performance

APPENDIX B

Variable Definition

Variable	Description
Log(grant_delta) =	sum of the sensitivities of grants of stock options and restricted stock during the fiscal year to a 1%change

	in stock price;
PFP =	log (#of phrases indicating 'Pay for Performance');
Peer PFP =	industry peer average PFP;
SIZE =	logarithm of sales;
MTB =	market value of equity / book value of equity;
PPE =	net property, plant & equipment / total assets;
Cashcomp =	total value of salary + bonus the CEO received during the year;
Stock Return =	annualized return for the fiscal year;
NOL =	indicator variable of net operating loss carry-forward in any of the 3 years prior
Cash =	cash and cash equivalents / total assets
Cashflow Shortfall =	prior 3 year average of (common and preferred dividends + cashflow from investing + cashflow from operations)/total assets;
Dividend Constraint =	indicator variable of where dividend constrained in any of the 3 years prior;
Leverage =	long-term debt / total assets;
ihcgov4 =	1 if sum of (CEO duality + committee size + busy committee + independent committee + old committee) higher than industry median, 0 otherwise;
CEO duality =	1 if CEO is not the Chairperson of the board, 0 otherwise;
Committee Size =	1 is committee size is above industry median, 0 otherwise;
Busy committee =	1 if committee busyness (more than 2 directorships) is below industry median, 0 otherwise;
Independent Committee =	1 if all committee members are independent external directors, 0 otherwise;
Old Committee =	1 if below industry percentage of old committee members (older than 68), 0 otherwise;
Institutional Ownership =	stock ownership by the top five institutions as a percentage of total institutional ownership;
Strong Performance =	1 if above industry peer return on assets, 0 otherwise;
Excess comp =	excess compensation based on economic determinants (Core et al. 2008);
Expected comp =	total compensation (tdc1) –excess compensation;
CEO duality =	indicator variable if CEO is the Chairperson of the Board;
CEO tenure =	logarithm of CEO tenure;

Restructuring =	1 if restructuring costs, 0 otherwise;
Foreign Operations =	1 if foreign exchange income(loss) is not missing, 0 otherwise;
Competition =	1 –Herfindahl–Hirschman index, estimated as the sum of the squared market share of all firms measured in sales
ROA =	Income before extraordinary items / beginning-of-the-year total assets;
Leverage =	long term debt / total assets;
Income Before Extraordinary Items =	1 if income before extraordinary items is negative, 0 otherwise;
Z Score =	Altman Z-score for predicting bankruptcy;
Log(Size) =	logarithm of beginning-of-the-year total assets;
d_mf =	indicator variable of whether there was a management forecast during the fiscal year

TABLE 1

Panel A: Sample Selection –Observations with 2014 Equity Grant delta

	Obs.
Number of S&P 1500 firms for the fiscal year 2014 in Execucomp	1494
Deduct firms missing 2014 grant delta	(992)
Deduct firms missing Compustat variables	(5)
Deduct firms missing Peer PFP	(8)
Deduct firms missing Governance variables	(32)
Number of final sample	457

Panel B: Industry Distribution of Pay-for-Performance phrases

Industry	Observations	Mean PFP
Food Products	13	4.9
Beer & Liquor	1	6.0
Recreation	2	3.5
Entertainment	2	0.0
Printing and Publishing	4	3.0
Consumer Goods	13	3.5
Apparel	4	4.3
Healthcare	6	2.7
Medical Equipment	22	3.3
Pharmaceutical Products	18	5.4
Chemicals	17	3.1
Rubber and Plastic Products	4	1.5
Construction Materials	9	3.2
Construction	9	3.2
Steel Works Etc	7	6.3
Machinery	20	3.8
Electrical Equipment	9	3.6
Automobile and Trucks	6	1.8
Aircraft	5	1.8
Metallic and Industrial Metal Mining	4	4.5

Petroleum and Natural Gas	15	3.7
Utilities	8	3.8
Communication	7	2.1
Personal Services	6	5.0
Business Services	38	3.3
Computers	9	4.4
Electronic Equipment	24	1.6
Measuring and Control Equipment	15	3.0
Business Supplies	9	2.2
Shipping Containers	3	11.3
Transportation	17	2.5
Wholesale	18	4.1
Retail	29	3.9
Restaurants, Hotels, Motels	12	5.3
Banking	30	2.7
Insurance	24	3.9
Real Estate	1	1.0
Trading	13	2.1
Almost Nothing	4	4.5

TABLE 2

Panel A: Descriptive Statistics

Variable	n	p25	mean	median	p75
pfp	457	1.00	3.46	3.00	5.00
log_pfp	457	0.69	1.20	1.39	1.79
log(grant_delta)	457	4.46	5.36	5.17	6.10
Peer PFP	457	1.32	1.38	1.39	1.45
SIZE	457	6.96	8.05	7.90	9.23
MTB	457	1.78	3.67	2.67	4.10
NOL	457	0.00	0.63	1.00	1.00
Cashflow Shortfall	457	-0.63	-0.47	-0.46	-0.27
Dividend Constraint	457	0.00	0.19	0.00	0.00
Cashcomp	457	6.59	6.87	6.86	7.08
Cash	457	0.05	0.14	0.10	0.21
PPE	457	0.06	0.22	0.14	0.30
Stock Returnt	457	-0.01	0.11	0.09	0.23
Stock Returnt-1	457	0.19	0.40	0.38	0.57
Leverage	457	0.05	0.18	0.17	0.27
CC Size	457	3.00	3.84	4.00	4.00
Busy CC	457	0.00	0.13	0.00	0.25
Independent CC	457	1.00	0.98	1.00	1.00
Old CC	457	0.00	0.30	0.25	0.50
CEO Duality	457	0.00	0.46	0.00	1.00
Institutional Ownership	386	0.32	0.38	0.37	0.44

Panel B: Correlation Matrix

	Log (pfp)	Log (delta _grant)	Peer PFP	SIZE	MTB	NOL	CFshort	DivCon	Cash Comp	Cash	PPE	Returnt	Returnt-1
log (grant_delta)	0.02												
Peer PFP	**0.14**	0.04											
Log(Sales)	**0.25**	**0.41**	**0.18**										
MTB	0.04	**0.19**	0.05	0.00									
NOL	-0.01	-0.01	0.08	0.03	0.03								
Cashflow Shortfall	0.02	**-0.13**	-0.06	0.05	**-0.26**	**-0.12**							
Dividend Constraint	-0.04	-0.05	-0.04	**-0.17**	0.04	-0.04	-0.02						
Cash Comp	**0.14**	**0.40**	**0.14**	**0.63**	-0.01	-0.05	**0.15**	-0.06					
Cash	-0.06	-0.02	-0.08	**-0.30**	**0.15**	0.00	-0.08	0.04	**-0.21**				
PPE	0.04	0.02	**0.12**	**0.14**	-0.01	-0.02	**-0.39**	0.06	0.07	**-0.27**			
Stock Returnt	0.03	**0.16**	-0.04	**0.17**	0.00	0.00	-0.02	0.06	0.07	0.07	0.00		
Stock Returnt-1	-0.06	0.05	-0.07	**-0.10**	**0.16**	-0.08	0.00	**0.11**	-0.07	-0.01	-0.07	-0.07	
Leverage	**0.11**	0.06	**0.10**	**0.26**	**0.12**	**0.11**	-0.04	**0.13**	**0.20**	**-0.32**	**0.35**	0.06	**-0.11**

Panel A presents summary statistics for the analysis sample. Panel B presents a univariate correlation matrix. Bold font indicates significance at the

5 percent level.Pfp is the number of phrases indicating 'Pay for Performance'. Log(PFP) is the logarithm of PFP. Log(grant_delta) is the sum of the sensitivities of grants of stock options and restricted stock during the fiscal year to a 1%change in stock price. Peer PFP is the industry peer average PFP. SIZE is the logarithm of sales. MTB is the market value of equity divided by the book value of equity. NOL is an indicator variable of net operating loss carry-forward in any of the 3 years prior. Cashflow Shortfall is the prior 3 year average of '(common and preferred dividends + cashflow from investing + cashflow from operations) divided by total assets'. Dividend Constraint is an indicator variable of where dividend constrained in any of the 3 years prior. Cashcomp is the total value of salary plus the bonus the CEO received during the year. Cash is cash and cash equivalents divided by total assets. PPE is the net property, plant & equipment divided by total assets. Stock Return is the annualized return for the fiscal year and the prior fiscal year. Leverage is long-term debt divided by total assets. CC Size is an indicator variable that is 1 if committee size is above industry median, 0 otherwise. Busy CC is 1 if committee busyness (more than 2 directorships) is below industry median, 0 otherwise. Independent CC is 1 if all committee members are independent external directors, 0 otherwise. Old CC is 1 if below industry percentage of old committee members (older than 68), 0 otherwise. CEO duality is 1 if CEO is not the Chairperson of the board, 0 otherwise. Institutional Ownership is stock ownership by the top five institutions as a percentage of total institutional ownership.

TABLE 3

Compensation Philosophy and Equity Grant Delta

	Dep. Variable: Equity Comp. Delta	
VARIABLES	coefficient	t statistics
log(PFP)	-0.2571**	(-2.308)
SIZE	0.2644***	(4.594)
MTB	0.0416*	(1.963)
NOL	-0.0034	(-0.025)
Cashflow Shortfall	-0.8826***	(-3.403)
Dividend Constraint	-0.0013	(-0.009)
Cash Compensation	0.7744***	(3.655)
Cash	0.4245	(0.692)
PPE	-0.1066	(-0.263)
Stock Returnt	0.3748	(1.519)
Stock Returnt-1	0.3059	(1.527)
Leverage	-0.3306	(-0.584)
Peer PFP	-4.7743*	(-1.891)
Constant	5.1322	(1.213)
Observations	457	
Adjusted R2	0.280	

Table 3 reports the OLS regressions results for the relationship between pay-for-performance in the Compensation Philosophy and Equity Grant Delta. The dependent variable is Log(grant_delta), the sum of the sensitivities of grants of stock options and restricted stock during the fiscal year to a 1%change in stock price. Log(PFP) is the logarithm of the number of phrases indicating 'Pay for Performance'. SIZE is the logarithm of sales. MTB is the market value of equity divided by the book value of equity. NOL is an indicator variable of net operating loss carry-forward in any of the 3 years prior. Cashflow Shortfall is the prior 3 year average of '(common and preferred dividends + cashflow from investing + cashflow from operations) divided by total assets'. Dividend Constraint is an indicator variable of where dividend constrained in any of the 3 years prior. Cash Compensation is the total value of salary plus the bonus the CEO received during the year. Cash is cash and cash equivalents divided by total assets. PPE is the net property, plant & equipment divided by total assets. Stock Return is the annualized return for the fiscal year and the prior fiscal year. Leverage is long-term debt divided by total assets. Peer PFP is the industry peer average PFP. *, **, *** Denote significance at $p < 0.10$, < 0.05, and < 0.01, respectively. I include industry fixed effects at the Fama-French 48 industry classifications level.

TABLE 4

Determinants of Pay-for-Performance Frequency

	log_pfp	
VARIABLES	coefficients	t statistics
Excess Compensation	0.3342***	(3.913)
Expected Compensation	0.2134	(1.443)
CEO duality	-0.1233	(-1.397)
CEO tenure	-0.1542***	(-2.595)
Restructuring	0.0225	(0.270)
Foreign Operations	-0.0290	(-0.358)
HHI	-1.6046	(-1.380)
ROA	-0.3726	(-0.414)
Leverage	0.2752	(1.004)
Income Before Extraordinary Items Loss	0.3874*	(1.928)
Z Score	0.1116*	(1.935)
Log(Size)	0.0129	(0.212)
Constant	0.8533	(0.622)
Observations	393	
Adjusted R2	0.0981	

Table 4 reports the OLS regressions results for the determinants of Log_PFP. The dependent variable is Log_PFPthe logarithm of the number of phrases indicating 'Pay for Performance'. Excess compensation is the excess compensation based on economic determinants (Core et al. 2008). Expected compensation is the total compensation (tdc1) minus excess compensation. CEO duality is an indicator variable if CEO is the Chairperson of the Board. CEO tenure is the logarithm of CEO tenure. Restructuring is 1 if restructuring costs, 0 otherwise. Foreign Operations is 1 if foreign exchange income(loss) is not missing, 0 otherwise. Competition is 1 – Herfindahl–Hirschman index, estimated as the sum of the squared market share of all firms measured in sales. ROA is Income before extraordinary items divided by beginning-of-the-year total assets. Leverage is long term debt divided by total assets. Income Before Extraordinary Items is 1 if income before extraordinary items is negative, 0 otherwise. Z Score is the Altman Z-score for predicting bankruptcy. Log(Size) is the logarithm of beginning-of-the-year total assets. *, **, *** Denote significance at $p < 0.10$, < 0.05, and < 0.01, respectively.

Table 5

Subsample Analyses – Corporate Governance

Panel A: Compensation Committee Governance

	Dep. Variable: Equity Comp. Delta			
	Strong Governance		Weak Governance	
VARIABLES	coefficient	t statistics	coefficient	t statistics
log(PFP)	-0.0508	(-0.430)	-0.6969***	(-3.043)
SIZE	0.3720***	(5.673)	0.1966*	(1.924)
MTB	0.0356	(1.632)	0.0468	(1.403)
NOL	-0.0093	(-0.054)	-0.1375	(-0.582)
Cashflow Shortfall	-0.7249***	(-2.812)	-1.8587***	(-3.303)
Dividend Constraint	0.0486	(0.267)	0.2573	(0.952)
Cash Compensation	0.6096***	(3.012)	0.9499**	(2.562)
Cash	0.1060	(0.156)	0.8430	(0.846)
PPE	0.2837	(0.628)	-1.4429*	(-1.679)
Stock Returnt	0.2263	(0.749)	0.7282*	(1.841)
Stock Returnt-1	0.2095	(0.947)	0.4376	(1.131)
Leverage	-0.3717	(-0.644)	-0.1836	(-0.171)
Peer PFP	-2.8651	(-1.447)	-16.0011***	(-2.831)
Constant	1.6088	(0.459)	23.2499***	(2.632)
Observations	262		195	
Adjusted R2	0.384		0.294	

Panel B: Institutional Ownership

	Dep. Variable: Equity Comp. Delta			
	High Institutional Ownership		Low Institutional Ownership	
VARIABLES	coefficient	t statistics	coefficient	t statistics
log(PFP)	-0.3487	(-1.393)	-0.2923*	(-1.921)
SIZE	0.3447***	(3.235)	0.2419***	(3.025)
MTB	0.0626	(1.204)	0.0488*	(1.765)
NOL	0.1596	(0.561)	-0.1123	(-0.624)
Cashflow Shortfall	-1.0322**	(-2.282)	-0.5081	(-1.453)
Dividend Constraint	0.0075	(0.027)	-0.0202	(-0.092)
Cash Compensation	0.9477**	(2.429)	0.5475**	(1.973)
Cash	1.9096	(1.522)	-0.9125	(-1.283)
PPE	-0.0358	(-0.043)	-0.2672	(-0.536)
Stock Returnt	-0.1058	(-0.224)	0.6826**	(2.219)
Stock Returnt-1	0.3905	(0.906)	0.1258	(0.518)
Leverage	-0.9490	(-0.972)	-0.9127	(-1.113)
Peer PFP	-10.2772	(-1.188)	-3.1581	(-0.850)
Constant	12.5998	(0.903)	4.5907	(0.740)
Observations	178		279	
Adjusted R2	0.232		0.235	

Table 5 reports the OLS regressions results for how Corporate Governance affects the relationship between pay-for-performance in the Compensation Philosophy and Equity Grant Delta. Panel A divides the entire sample into subsamples based on Compensation Committee governance. Compensation Committee governance is defined as IHCGOV4. IHCGOV4 is 1 if the sum of (CEO duality + committee size + busy committee + independent committee + old committee) is higher than industry median, and 0 otherwise. Panel B divides the entire sample into subsamples based on Institutional Ownership. If Institutional Ownership is above the industry median Institutional Ownership, then the firm is included in the high Institutional Ownership subsample, and if Institutional Ownership is below the industry median level Institutional Ownership, then the firm is included in the low Institutional Ownership subsample. The dependent variable is Log(grant_delta), the sum of the sensitivities of grants of stock options and restricted stock during the fiscal year to a 1%change in stock price. Log(PFP) is the logarithm of the number of phrases indicating 'Pay for Performance'. SIZE is the logarithm of sales. MTB is the market value of equity divided by the book value of equity. NOL is an indicator variable of net operating loss carry-forward in any of the 3 years prior. Cashflow Shortfall is the prior 3 year average of '(common and preferred dividends + cashflow from investing + cashflow from operations) divided by total assets'. Dividend Constraint is an indicator variable of where dividend constrained in any of the 3 years prior. Cash Compensation is the total value of salary plus the bonus the CEO received during the year. Cash is cash and cash equivalents divided by total assets.

PPE is the net property, plant & equipment divided by total assets. Stock Return is the annualized return for the fiscal year and the prior fiscal year. Leverage is long-term debt divided by total assets. Peer PFP is the industry peer average PFP. *, **, *** Denote significance at p < 0.10, < 0.05, and < 0.01, respectively. I include industry fixed effects at the Fama-French 48 industry classifications level.

TABLE 6

Subsample Analyses – Firm Performance

	Dep. Variable: Equity Comp. Delta			
	Strong Performance		Weak Performance	
VARIABLES	coefficient	t statistics	coefficient	t statistics
log(PFP)	-0.2350	(-1.367)	-0.3215**	(-2.282)
SIZE	-0.0256	(-0.290)	0.4931***	(6.853)
MTB	0.0159	(0.738)	0.0781	(1.052)
NOL	-0.2885	(-1.399)	0.2747	(1.467)
Cashflow Shortfall	-0.7636*	(-1.966)	-0.9002***	(-2.954)
Dividend Constraint	-0.0607	(-0.228)	0.0163	(0.090)
Cash Compensation	1.4442***	(4.838)	0.3469	(1.553)
Cash	-0.8164	(-0.794)	1.9016**	(2.082)
PPE	-0.2138	(-0.280)	-0.3389	(-0.635)
Stock Returnt	0.4557	(1.170)	0.0694	(0.188)
Stock Returnt-1	0.0065	(0.021)	0.1258	(0.433)
Leverage	0.4713	(0.512)	-0.2109	(-0.329)
Peer PFP	-5.2677	(-1.539)	-6.6515**	(-2.221)
Constant	3.9287	(0.681)	8.8065*	(1.767)
Observations	213		244	
Adjusted R2	0.248		0.372	

Table 6 reports the OLS regressions results for how firm performance affects the relationship between pay-for-performance in the Compensation Philosophy and Equity Grant Delta. The general sample is divided into subsamples based on firm performance. If return on assets is above industry peer return on assets, then the firm is categorized as high performance. If return on assets is below industry peer return on assets, then the firm is categorized as low performance. The dependent variable is Log(grant_delta), the sum of the sensitivities of grants of stock options and restricted stock during the fiscal year to a 1%change in stock price. Log(PFP) is the logarithm of the number of phrases indicating 'Pay for Performance'. SIZE is the logarithm of sales. MTB is

the market value of equity divided by the book value of equity. NOL is an indicator variable of net operating loss carry-forward in any of the 3 years prior. Cashflow Shortfall is the prior 3 year average of '(common and preferred dividends + cashflow from investing + cashflow from operations) divided by total assets'. Dividend Constraint is an indicator variable of where dividend constrained in any of the 3 years prior. Cash Compensation is the total value of salary plus the bonus the CEO received during the year. Cash is cash and cash equivalents divided by total assets. PPE is the net property, plant & equipment divided by total assets. Stock Return is the annualized return for the fiscal year and the prior fiscal year. Leverage is long-term debt divided by total assets. Peer PFP is the industry peer average PFP. *, **, *** Denote significance at p < 0.10, < 0.05, and < 0.01, respectively. I include industry fixed effects at the Fama-French 48 industry classifications level.

TABLE 7

Sample Selection Bias

Panel A: Tobit Analysis

VARIABLES	tobit model	
	coefficient	t statistics
log(PFP)	-0.2571**	(-2.449)
Peer PFP	-4.7743**	(-2.007)
SIZE	0.2644***	(4.876)
MTB	0.0416**	(2.083)
NOL	-0.0034	(-0.026)
Cashflow Shortfall	-0.8826***	(-3.612)
Dividend Constraint	-0.0013	(-0.009)
Cash Compensation	0.7744***	(3.879)
Cash	0.4245	(0.735)
PPE	-0.1066	(-0.279)
Stock Returnt	0.3748	(1.612)
Stock Returnt-1	0.3059	(1.621)
Leverage	-0.3306	(-0.620)
Sigma	1.0745***	(22.777)
Constant	5.1322	(1.287)
Observations	457	

Panel B: Heckman Twostep Analysis

VARIABLES	d_grant		log_delta_grant	
	coefficient	t statistics	coefficient	t statistics
log(PFP)	0.0806	(1.511)	-0.3847*	(-1.909)
d_mf	0.1693*	(1.852)		
Peer PFP	-0.0097	(-0.036)	-4.4801	(-1.304)
SIZE	0.0838**	(2.502)	0.1231	(0.796)
MTB	0.0230*	(1.655)	0.0026	(0.057)
NOL	0.1473*	(1.773)	-0.2782	(-0.897)
Cashflow Shortfall	-0.0442	(-0.307)	-0.6964*	(-1.744)
Dividend Constraint	-0.1577	(-1.599)	0.2631	(0.756)
Cash Compensation	0.1135	(1.140)	0.5692*	(1.805)
Cash	0.3778	(1.215)	-0.0141	(-0.015)
PPE	-0.3091	(-1.482)	0.4329	(0.516)
Stock Returnt	0.1155	(0.781)	0.0703	(0.165)
Stock Returnt-1	0.1511	(1.236)	0.1187	(0.321)
Leverage	0.3239	(1.088)	-0.7737	(-0.880)
lambda			-2.6164	(-1.233)
Constant	-1.9135***	(-2.735)	10.0157	(1.376)

Panel A reports the Tobit regressions results for the relationship between pay-for-performance in the Compensation Philosophy and Equity Grant Delta. Panel B reports the results for the two step Heckman selection model. The first stage probit model predicts d_grant, an indicator variable for whether the firm granted equity in 2014. The instrument used is d_mf, an indicator variable for whether the firm issued a management forecast in 2014. The dependent variable in the second step is Log(grant_delta), the sum of the sensitivities of grants of stock options and restricted stock during the fiscal year to a 1%change in stock price. Log(PFP) is the logarithm of the number of phrases indicating 'Pay for Performance'. SIZE is the logarithm of sales. MTB is the market value of equity divided by the book value of equity. NOL is an indicator variable of net operating loss carry-forward in any of the 3 years prior. Cashflow Shortfall is the prior 3 year average of '(common and preferred dividends + cashflow from investing + cashflow from operations) divided by total assets'. Dividend Constraint is an indicator variable of where dividend constrained in any of the 3 years prior. Cash Compensation is the total value of salary plus the bonus the CEO received during the year. Cash is cash and cash equivalents divided by total assets. PPE is the net property, plant & equipment divided by total assets. Stock Return is the annualized return for the fiscal year and the prior fiscal year. Leverage is long-term debt divided by total assets. Peer PFP is the industry peer average PFP. *, **, *** Denote significance at $p < 0.10$, < 0.05, and < 0.01, respectively. I include industry fixed effects at the Fama-French 48 industry classifications level.

국문초록

보상 철학 공시와 경영자 주식기준보상의 관계

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기업의 보상 설명 및 분석 (Compensation Discussion & Analysis) 공시에서는 성과를 기준으로 경영진의 임금 수준을 결정하는 보상 철학이 강조되어 왔다. 그러나 실제로 기업들이 공시한 보상 철학에 맞추어 경영진에게 보상을 지급하였는지에 대하여는 연구된 바가 없다. 본 연구는 미국 S&P1500 기업 중 2014년에 신규로 주식기준보상을 제공한 기업들을 대상으로 하여, 성과연동 보상지급을 보상 설명 및 분석 공시에서 보상철학으로 강조한 기업들이 실제로 성과보상민감도가 높은 주식기준보상을 제공하였는지를 분석하였다. 분석 결과, 성과별 보상지급을 빈번하게 언급한 기업일수록 주식기준보상의 성과보상민감도가 유의하게 낮았다. 이러한 음(-)의 관계는 기업지배구조가 약하거나 성과가 낮은 기업에서 두드러졌다. 반면에, 기업지배구조가 우수하거나 성과가 높은 기업들은 보상철학에서 성과별 보상지급을 언급한 횟수와 주식기준보상의 성과보상민감도가 유의하게 나타나지 않았다. 이러한 연구 결과를 바탕으로, 본 연구는 보상 철학이 정보이용자에게 추가적인 정보를 전달하기보다는 인상 관리를 위한 수단으로 이용된다는 점을 밝힌 데 의의가 있다고 할 것이다.

주요어: 보상 공시, 내용 분석, 주식기준보상

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